

IN THE CLAIMS:

1. (currently amended) A passively temperature-compensated optical grating device comprising:

a support frame formed of a material exhibiting a relatively low coefficient of thermal expansion (CTE), said support frame including a floor bottom surface, a first fixed sidewall and a second fixed sidewall and a lever arm as a second, movable sidewall;

a lever arm formed of a relatively low coefficient of thermal expansions (CTE) material fixed at a first end to a predetermined pivot point along the support frame bottom surface, a second, remaining end of said lever arm free to rotate about said pivot point;

an optical fiber grating attached between said first fixed sidewall and said second, remaining end of said lever arm; and

an expansion element formed of a material exhibiting a relatively high coefficient of thermal expansion (CTE), said expansion element coupled between the second, fixed sidewall and attached to said support frame and disposed to be in physical contact with said lever arm, wherein changes in the dimensions of said high CTE expansion element as a function of temperature rotate changes results in rotating said lever arm through a predetermined angle about said pivot point to adjust modify the strain applied to said optical fiber grating and change such that the strain nullifies wavelength of said optical grating device changes associated with temperature changes.

2. (currently amended) The passively temperature-compensated optical grating device of claim 1 wherein the low CTE support frame and fixed sidewall lever arm comprise Kovar.

3. (currently amended) The passively temperature-compensated optical grating device of claim 1 wherein the low CTE support frame and fixed sidewall lever arm comprise Invar.

4. (*original*) The passively temperature-compensated optical grating device of claim 1 wherein the high CTE expansion element comprises an aluminum alloy.

5. (*original*) The passively temperature-compensated optical grating device of claim 1 wherein the high CTE expansion element comprises brass.

6. (*currently amended*) The passively temperature-compensated optical grating device of claim 1 wherein the high CTE expansion element comprises an expansion arm disposed between the a second, fixed sidewall and the lever arm.

7. *cancelled*